

**National Climate Assessment Development and Advisory Committee
Teleconference
USGCRP National Coordination Office
1717 Pennsylvania Ave NW, Washington, DC**

20 May 2011, 1:00-5:00 PM (Eastern Time)

Opening Remarks, Roll Call, Approval of Minutes, Expectations for Meeting

Jerry Melillo, Marine Biological Laboratory and Chair, NCADAC

The meeting was called to order by the newly-appointed chair, Jerry Melillo, and the designated federal official from NOAA, Cynthia Decker.

Dr. Melillo noted that great progress has been made since the last meeting. Almost all of the non-federal committee members have been fully approved; thirteen members were asked to serve on the Executive Secretariat. They were given a charge by Dr. Jane Lubchenco, the NOAA Administrator, and will be guided by decisions made by the full NCADAC at public meetings.

At the April meeting, the full committee decided to establish four ad hoc working groups. Each working group was responsible for subset of key issues to shape the NCA. Committee members, agency representatives, and, in some cases, additional subject matter experts from the scientific community worked on these ad hoc working groups.

The Chair requested a motion to approve of agenda as outlined and there was unanimous agreement.

Finally, the Dr. Melillo noted that the distributed summary document from the April meeting did not constitute formal minutes. Dr. Decker is working with Kandis Wyatt and NCA staff to produce a shorter form of the minutes to state the issues clearly and concisely and provide a summary of key discussion points and actions taken. Dr. Melillo indicated that Dr. Decker will provide the committee with longer and shorter versions that meet the standards of the Federal Advisory Committee Act. The committee may then choose an approach it would like to use for future meetings. Dr. Decker will find out if this process can be carried out through an email vote.

At this meeting each working group delivered a short presentation, ending with a clear statement of recommendations. After discussion of the recommendations, there was consideration of actions, as appropriate.

Action 1: Cynthia Decker will prepare meeting minutes for review and approval by the NCADAC. The format and level of information contained in these will be agreed upon by the members for future minutes.

Report on the Results from NCADAC Ad Hoc Working Group 1: Interim Strategy, Draft Outline and Federal Agency Activities

Jerry Melillo, Marine Biological Laboratory and Chair, WG1

Summary

The charge to this group was to develop guidelines for the 2013 National Climate Assessment Report within the context of the sustained assessment process. This working group focused on the scope and outline of 2013 Report, primarily, but also kept in mind things to be put into place that would continue beyond 2013.

Jerry Melillo explained several options that the group considered for the process of the 2013 report and the longer process. The first option is the most minimal, only addressing the Global Change Research Act (GCRA) minimum requirements. The second option included the basic elements of GCRA, plus inclusion of geographical regions as was done in 2000 and 2009 NCA reports, plus enrichment of these with some very brief sections on cross-cutting topics. The third option included basic elements of GCRA as well as a series of temporally-staggered but comprehensive reports on cross-cutting issues, greater elaborations on regions and sectors. A few of these might be completed in time for inclusion in the 2013 report but most of the others would be produced after 2013. The Working Group is recommending that the NCA process be a hybrid of options 2 and 3: meet the requirements of GCRA, lay out new approaches, add new topics and cross-cuts, and address regional activities as well as possible inclusion of indicators and web-based deployment of the materials. The vision for the 2013 Report is to use the 2009 NCA Report as starting place, making sure to address new science on climate change that has been published since that time, the new research that is being done, the sectors identified in GCRA, additional sectors that are important (e.g., oceans, if consider a sector), and some cross-cuts. Some cross-cuts might be completed for the 2013 Report; others may be started before 2013 but won't be completed until after the 2013 Report. It was noted this is a very ambitious plan.

Referring to the Scope and Outline slide, the advice is that the NCA use CMIP3, but there is enough interest in CMIP5 that the Working Group recommends bringing that into the climate change science section.

For sectoral cross-cuts, the committee will need to decide very soon on those to be included in the 2013 Report and those to be completed after 2013. The timing for all of these should be clearly identified. In addition to sectoral crosscuts, there may be biogeographical crosscuts as well.

The regions suggested are slightly differently from those used in the 2009 Report. The boundaries are now based on states but would consider major vulnerabilities in regions. The NCA wants to ensure these are correct and address what people in these regions care about. For example, the report should first determine how people in the regions (and sectors) would use the assessment products to inform the mitigation and adaptation actions that they could or are taking.

There will be a lot of information across the regions for people to report out by 2013 and the Working Group expects modest updates to the 2009 Report, using new scenario information to extent that the regions can. On mitigation and adaptation, for example, the assessment will have to figure out how to include anecdotal information.

After discussion, the working group would like the NCADAC to provide a general agreement on the proposed way forward, with final approval by June 1 so that the Executive Secretariat can put these decisions into actions in early June. Federal and non-federal teams are eager to move ahead in producing topical reports for the assessment. They are waiting for guidelines from the NCADAC on this.

Discussion

The members had a number of questions and concerns about the draft interim strategy and the options that were presented. Some felt that it was very ambitious and wanted to better understand how the process would be worked out for making decisions about the material to be included in the 2013 Report versus the long-term process.

There was also discussion about the proposed cross-cutting topics and what these might be; which ones could be developed in time for the 2013 Report. The question of whether the topic of food security could be addressed as a cross-cut was raised. Since it includes agriculture, water resources, and energy needs, it could serve as a good example. Dept. of Agriculture indicated some concern that this topic not be used to substitute for a section on agriculture specifically since the topic of food security would not cover all of the non-food agricultural issues. Other topics considered for inclusion in cross-cuts were urban areas, migratory species (especially since these move across international boundaries), semi-arid areas, high elevation areas, and the Arctic. A question was raised about whether “oceans” is a cross-cut, a sector or a region. It is currently identified as a sector because of its use for resources. The committee members agreed that some sort of matrix is needed to lay out what cross-cutting topics could be addressed and whether they will be targeted for the 2013 report or the longer process. It was noted that many of the federal agencies are already moving forward on certain topics and just need the approval of the NCADAC to develop products for the 2013 Report.

A question was raised about whether national security impacts of climate change will be addressed by the report. The Dept. of Defense indicated that it believes those concerns are being addressed through other processes and don’t need to be addressed in the NCA.

The example watersheds to be addressed were also discussed. Some members felt that the Mississippi watershed should be included. Others believed that the Gulf of Mexico should be highlighted. There was no consensus to change the strategy on watersheds but the group agreed to consider the Gulf coast in the context of the new coastal region and the Mississippi in the context of the Great Plains region.

The group agreed that all of the regional and sectoral efforts will need to be considered in the context of the scenario development and the collection of baseline data.

Action 2: The NCADAC approved the Interim Strategy and Draft Outline as prepared by Working Group 1. The committee agreed to the recommendation from the working group that the approach be a hybrid of options 2 and 3.

Report on the Results from NCADAC Ad Hoc Working Group 2: Engagement Strategy and Requests for Information

Jim Buizer, Arizona State University and Chair, WG2

Summary

The charge to Working Group 2 was to develop a proposal for engagement and communication strategies and how to put out a request for information. The WG starting point was the drafts developed by the NCA staff and presented at the NCADAC meeting in May. The WG was generally satisfied with the approach proposed for engagement and for the request for information. The WG is recommending only minor changes to them. The working group also considered the regional engagement approach that the Interagency National Climate Assessment Task Force (INCA TF) developed.

The engagement strategy outlines the need for participation and communication - identifying the stakeholders, opportunities for participation, evaluation of participation, milestones and outcomes, and suggested best practices. The participation and communication drafts have been merged into a single, overarching engagement strategy.

The proposed Request for Information (RFI) makes it clear that USGCRP isn't responsible for funding teams that provide input. The NCA will review input and send back if incomplete; the process must ensure that technical inputs meet scientific quality and rigor standards. The input will be posted publicly on the NCA online database; instructions will be provided on how to provide input, who to send it to, etc. In addition, the RFI will be clear that responding does not imply a binding contract with the government to support the work and that information received may or may not be included in the report. In addition, whatever is submitted cannot be considered proprietary or confidential.

The WG provided an additional recommendation regional and sectoral engagement – to incorporate non-federal partners and private sector activities. An expanded discussion of regional and sectoral activities to be developed should be held in the context of the resources available and to manage expectations. The suggestion is how to connect over time with the broadest possible audience.

A further recommendation is for the NCADAC members to participate in “speaker's bureau”, i.e. use NCADAC as part of communication effort, asking members to identify critical, potential partners, communication assets within own agencies, businesses and universities who could be leveraged on behalf of NCA. The point was also made that this plan should remain flexible in order to adapt to the changes in the process over time.

Finally, the WG used a diagram developed by the NCA staff to help those submitting technical input to understand where in the process their contributions might fit. Other Working Groups are welcome to use or modify this diagram.

Additional Recommendations as stated in the Working Group report:

- Establish a mechanism to ensure that outcomes from the four working groups are fully synchronized after May 20 meeting
- Develop an expanded discussion of the regional and sectoral approaches to engagement
- NCADAC should work with USGCRP to ensure that engagement activities are properly resourced
- Publish the RFI in the Federal Register
- Encourage NCADAC members to play an active role in building the communications strategy
- Establish a working group to develop a framework for the process of responding to expressions of interest and reviewing submitted products
- Treat the engagement strategy as general guidance to be modified as needed.

Discussion

The discussions focused on the draft request for information and the concerns about the data and information that might be submitted in response, particularly as they might meet Information Quality Act standards. The members liked the language of the RFI and agreed it should be released soon. They were concerned that it would only be released through the federal register. The NCA staff indicated that the FR would be only one way of disseminating this call and had many ways of getting the word out on this. Other members had some concern about the peer-review requirements for any data used in the assessment and how this would be applied to what is submitted through the RFI. The response was that the assessment has been thinking about this and is the subject of Working Group 4. A particular concern is indigenous and place-based knowledge and how it can be used in the context of these requirements.

Action 3: The NCADAC approved the revised Engagement Strategy and the Request for Information. Additional recommendations proposed by the group were also approved without changes.

Report on the Results from NCADAC Ad Hoc Working Group 3: Scenarios and Regional Summaries

Richard Moss, Pacific Northwest National Laboratory/ University of Maryland and Chair, WG3

Summary

Richard Moss introduced the working group and provided background on the issue. The committee tended to focus more on the strategy for scenarios and regional climate information in terms of what the NCADAC is going to produce and less on the implementation of that because only a few members of the INCA Task Force participated with the group. Moss attended an INCA TF meeting to speak to the members and identify the agency resources that could be incorporated into the scenarios and inform the agencies who may be conducting work in Summer 2011 about what the NCADAC recommends.

Moss noted important assumptions about how the scenarios will be used. The first user group will be the general public and the second will be the research audience. The scenarios will be

useful in providing context and describing a range of possible futures. The scenarios and associated data will be available for use in various kinds of studies.

This working group focused on preparing the 2013 report and how to bridge to the long-term process. An evaluation of the scenario development process will be included in the report to set the stage for moving forward. There was an emphasis on practicality in terms of information and sources that are already established, documented, and available. This includes CMIP3 and impacts work.

Dr. Moss continued by reviewing the WG recommendations. The first set of recommendations related to climate; the second was about sea level change; the third set covered land use/land cover change; the fourth related to socioeconomic scenarios; and the fifth set related to participatory scenario planning. The land use/land cover recommendations were not completed in this timeframe but will be coming soon. This topic has been covered in previous assessments so there is a wealth of information. Tony Janetos is leading a process with agency individuals to identify resources. Dr. Moss noted that the ranges of conditions will be at different and limited to larger scales as the timing of projections increases into the future.

Discussion

Members of the NCADAC raised several points about the suggested actions. One member thought that the scenarios strategy should include baseline comparisons to both a more recent and a longer time period. Dr. Moss agreed with this.

Another member noted that there have been many discussions with relevant federal agencies about land use/land cover and he expect there to be a workshop on this topic that will provide the details and timing of the wide variety of products for baselines and scenarios. If the workshop can be organized this summer, it will maximize its usefulness for the various sectoral and regional efforts. This workshop will be open to attendance by all members of the NCADAC.

The idea of risk management and adaptation was raised in the context of scenarios as being an extremely important component of the analysis. Members agreed that comparing future projections with observed trends in the recent past will be critical, particularly in the regions. This is what Ken Kunkel has tried to do in the Midwest with the example he provided at the April NCADAC meeting. Regional downscaling in order to support adaptation scenarios will be difficult but necessary.

One member noted that the scenarios emphasize the middle time period of 2041-2050. This time period is not useful for many communities, which need a planning horizon of 10-15 years out. Dr. Moss indicated that the group did not much discuss that shorter timeframe but could do so. Relevant to this, members noted that the law requires the assessment to look at projections in the 25 and 100-year timeframes. Another member asked for more useful time-steps in the regional downscaling. Dr. Moss and Dr. Kunkel will work on this.

Action 4: The NCADAC agreed under separate motions to the general recommendations and the specific sub-recommendations for climate, sea level rise and socioeconomic scenarios as well as

participatory planning with the caveats agreed upon during the discussion. The NCADAC will consider the recommendations for land use/land cover scenarios at a later date.

Action 5: The NCADAC agreed that Working Group 3 should be maintained in order to continue the work on scenarios in support of the overall assessment.

Report on the Results from NCADAC Ad Hoc Working Group 4: Peer Review & Data Management/ Web Portal

T.C. Richmond, GordonDerr, LLC and Chair, WG4

Summary

This group was tasked to address several different topics, including the development of a web-based portal for climate information, the development of peer-review processes for data and information to be used in the assessment, and the use of the web for deployment of data, considering the Information Quality Act. Attributes for web deployment include flexibility, searchability, modular approach, layering of information, ability for users to tailor products for themselves, and cost-effectiveness.

Printing and web-deployment have pros and cons with respect to cost. Web deployment saves costs of traditional printing but the cost associated with the need to continually peer-review data and information that may be added to the web could become high. It is difficult to compare the two since they are quite different philosophically. The printed document is static and the web document will evolve over time as data and products are added and updated.

Working Group 4 recommends the web as the primary mechanism for deploying the assessment.

The group also addressed peer review mechanisms for data that has not been previously peer-reviewed that is desired to be used in the assessment. Examples of this include data from states, tribes, and utilities, local and indigenous knowledge, industry journals, workshop and conference proceedings, and other data collected but not yet published, as well as some local or sector assessments.

Working Group 4 recommended the formation of a NCADAC subgroup to develop guidelines and; mechanisms for the use of information in the NCA and assess the need for a standing peer review group.

Finally the group examined the issue of data management for the assessment. This is a significant issue and involves resolution of concerns over static versus “live” or evolving data. The use of data in the assessment must also be transparent, meaning they must be discoverable, accessible and usable and of peer-reviewed and specified quality.

Working Group 4 recommended the formation of a NCADAC subgroup on data management that will recommend processes and provide guidance all in the context of existing agency policies.

Discussion

There was a very active and engaged discussion on the working group's recommendations. Members noted initially that deploying the final assessment report in 2013 only on the web was probably not feasible. The ultimate audience for this is Congress and that body generally prefers to receive hard copies. In addition, a couple of members noted that there are communities that have limited or no regular access to the web and hard copies will be the only way to reach them with this information. Therefore, there will almost certainly have to be some sort of static, printed version of the report produced at the end of the process. However, members did agree that there should be web deployment as well, that this will provide great opportunities for people to discover the amount of material that was used to support the final report. The printed version of the report could be fairly short and concise while the web could contain "layers" of detail and could organize the supporting material in ways that are useful for different audiences. One member pointed out that web deployment is not necessarily less expensive since a well-established and maintained website can be very expensive compared to a one-time printing of a report. NOAA Office of General Counsel pointed out that the law does not proscribe how the report is to be submitted so web or hard copy or both would meet the requirement.

The web will also continue to support data and information that accumulates after the 2013 report is delivered. The concern about this is how to ensure adequate peer review of this material. While they will not accumulate continuously but instead, intermittently, there will still need to be a process in place that ensures the quality of what is posted is assured and that the peer review requirement of IQA is met.

As a result of these discussions, the Committee agreed that WG4's first recommendation should be modified to reflect the sense of the group. The proposed new language is as follows:

"Employ the web as a primary mechanism for delivering assessment content, but address the issues raised in the discussion about the balance between web-based and print."

Action 6: The NCADAC agreed to WG4 recommendation on deployment of the 2013 report as amended. This topic will be further discussed at the next NCADAC meeting.

Action 7: The NCADAC agreed to the WG4 recommendations to form two subgroups, one on the use of information and a standing peer review group and one on data management.

New Business

Deferred to the end of the meeting but time ran out. Members were asked to send messages about new business to Kathy Jacobs and Cynthia Decker for consideration at a future time.

Summary of Actions and Next Steps

Jerry Melillo, Marine Biological Laboratory and Chair, NCADAC

The Chair summarized the actions as a result of the discussions of the working group reports and recommendations. The NCADAC agreed with this summary.

Public Comments

See Appendix B.

Final Comments and Wrap-up

Jerry Melillo, Marine Biological Laboratory Woods Hole and Chair, NCADAC

The Chair noted that several of the recommendations approved included the formation of working groups. Given the need for speed in setting up both these and working groups on other topics, motions were made that the Executive Secretariat would establish these groups and notify the full NCADAC. After discussion of this, including input on FACA requirements from the designated federal official, the motion was amended to include notification to the NCADAC with the right to respond before the groups are established.

Action 8: The NCADAC agreed that the Executive Secretariat will put together proposals for working groups on behalf of the NCADAC. Descriptions of proposed working groups will be distributed to the NCADAC members via email. The members will have one week to provide comments or disagreement and to volunteer to serve on such groups. No response will be assumed to be concurrence. After one week, the Executive Secretariat will move forward to establish the working groups as per comments and volunteers from the NCADAC members.

Adjourn

The teleconference was adjourned at 5:00 PM.

APPENDIX A. ATTENDEES

Members in attendance

Name	Affiliation
Daniel Abbasi	Mission Point Capital Partners
Virginia Armbrust	University of Washington
T. M. Bull Bennett	Kiksapa Consulting, LLC
Rosina Bierbaum	University of Michigan
Maria Blair	American Cancer Society
James Buizer	Arizona State University
Lynne Carter	Louisiana State University
Jan Dell	CH2MHill
Paul Fleming	Seattle Public Utilities
Aris Georgakakos	Georgia Institute of Technology
David Gustafson	Monsanto Company
David Hales	College of the Atlantic
John Hall	Department of Defense
Sharon Hays	Computer Sciences Corporation
Len Hirsch	Smithsonian Institution
Patricia Jacobberger-Jellison	NASA
Anthony Janetos	Joint Global Change Research Inst., U. Maryland
Tom Karl	NSTC Subcommittee on Global Change Research
Rattan Lal	Ohio State University
Jo-Ann Leong	Hawaii Institute of Marine Biology
Diana Liverman	University of Arizona
George Luber	Department of Health and Human Services
Edward Maibach	George Mason University
Michael McGeehin	RTI International
Jerry Melillo	Marine Biological Laboratory
Richard Moss	Joint Global Change Research Inst., U. Maryland
Phillip Mote	Oregon State University
Jayantha Obesekera	Southwest Florida Water Management District
Robert O'Connor	NSF
Marie O'Neill	University of Michigan
John Posey	East-West Gateway Council of Governments
Sara Pryor	Indiana University
Terese Richmond	GordonDerr, LLP
Andrew Rosenberg	Conservation International
Arthur Rypinski	Department of Transportation
Richard Schmalensee	Massachusetts Institute of Technology
Gerry Schwartz	HGS Consultants, LLC
Joel Smith	Stratus Consulting
Alan Thornhill	Department of Interior
Donald Wuebbles	University of Illinois
Gary Yohe	Wesleyan University

Staff in attendance

Name	Affiliation
Ralph Cantral	National Climate Assessment Office, USGCRP (NOAA)
Emily Cloyd	National Climate Assessment Office, USGCRP
Cynthia Decker	Department of Commerce, NOAA
Bryce Golden-Chen	National Climate Assessment Office, USGCRP
Stephanie Herring	Department of Commerce, NOAA
Katharine Jacobs	National Climate Assessment Office, OSTP
Melissa Kenney	National Climate Assessment Office (AAAS-NOAA)
Fred Lipschultz	National Climate Assessment Office , USGCRP (NASA)
Julie Maldonado	National Climate Assessment Office, USGCRP (intern)
Sheila O'Brien	National Climate Assessment Office, USGCRP
Glenn Tallia	Department of Commerce, NOAA
Anne Waple	Department of Commerce, NOAA
Kandis Wyatt	Department of Commerce, NOAA

Public in attendance

Name	Affiliation
Nick Sundt	World Wildlife Fund
Norm Rogers	Private citizen

APPENDIX B.

PUBLIC COMMENTS

Two statements were made at the meeting. Both commenters were present at the USGCRP Office.

Norm Rogers, private citizen

Mr. Rogers stated he was happy to see critical discussion towards end of the meeting but found it remarkable that no one voted no on anything. He believes the people on this committee are professionally engaged in global warming industry, making salaries and academic reputations based on predictions of catastrophic global warming, and that the committee lacks diversity of opinion. He quoted Upton Sinclair, who said it is difficult to get a man to admit he is wrong if his paycheck depends on it ("It is difficult to get a man to understand something when his salary depends on his not understanding it."). Mr. Rogers thinks the global warming narrative is crashing and that Congress and the public no longer believe it. He thinks the IPCC process is scientifically flawed and that the 2009 National Climate Assessment report (Global Climate Change Impacts in the United States, Thomas R. Karl, Jerry M. Melillo, and Thomas C. Peterson, (eds.). Cambridge University Press, 2009) is a disgrace, containing no citations. He thinks the NCA will be out of business before 2013 because people will be tired of the subject. He admonished the committee to "open your eyes and begin hedging your bets."

Nicholas Sundt, World Wildlife Fund

Mr. Sundt began by stating that WWF is a big supporter of the last assessment and wants to engage in this assessment. He raised three issues:

1. **Need for timely information** (final report outline, detailed and current timeline, etc), without which it is difficult to properly engage in the assessment. In the near term the workshops are a good engagement point. WWF would like to know when the workshops will take place in the regions so the organization and other groups can support the process. The extent to which other groups will engage is unknown, but there is interest. There is a short time period for holding the workshops so it will be difficult to deploy resources to support them. The sooner WWF can get a specific outline of these activities, the easier it will be for it to organize with other groups and put resources behind these efforts.
2. **Resource needs vs resource availability.** WWF is aware there is an issue of resource availability, but there haven't been any actual funding numbers provided yet. It would be good to know what the NCADAC believes the NCA needs to get the job done.
3. **Decision-making process.** There are a lot of entities associated with the assessment, i.e. the INCA, SGCR, the agencies, etc., but it is unclear how they fit together and how decisions are made. It would be useful to know who is making the decisions on the workshops so that stakeholders know who to approach.